

REMARKS

This application has been carefully reviewed in light of the Office Action dated October 7, 2003. Claims 1-11 and 13-14 remain pending in this application. Claims 1 and 13 are the independent claims. Favorable reconsideration is respectfully requested.

On the merits, the Office Action rejected Claims 13-14 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully believes the amendments to Claim 13 adequately respond to the rejections and respectfully request their withdrawal.

Further on the merits, the Office Action rejected Claims 1-2, 4-10, and 13-14 under 35 USC § 102(b) as being anticipated by Pressesky et al. (U.S. Patent No. 5,989,499; hereinafter "Pressesky"). The Office Action also rejected Claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Pressesky in view of Tsuji et al (U.S. Patent No. 5,861,952; hereinafter "Tsuji"). The Office Action also rejected Claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Pressesky in view of Maris (U.S. Patent No. 6,317,216; hereinafter "Maris"). Applicant respectfully submits that the pending application and claims are patentable for at least the following reasons.

Applicant's Claim 1 recites: "A device for the inspection of one or more a rotating surface (8) of a wafer (13), which device includes at least one light source (1), and a beam splitter (4) for splitting a light beam (2) that is emitted by said source into at least one reference beam (6) that is applied to a detector (16) and at least one measuring beam (5) that is applied to the surface (surfaces), the at least one measuring beam (5) containing at least one component in the direction of movement (U) of the relevant surface (8) or in the opposite direction, and the light (15) that is reflected by the surface (8) having, at least upon detection of a defect (14) on the surface (8), a frequency ( $v'$ ) that has been shifted relative to the at least one measuring beam (5) and that the at least one reference beam (6) can be superposed thereon, characterized in that the device includes an evaluation unit (29) for determining the velocity ( $v$ ) of a defect (14) on the surface (8) from the shifted frequency ( $v'$ ) and from this velocity the position of the defect on the surface (8)."

Pressesky fails to recite or suggest an evaluation unit for determining the velocity of a defect on the surface and from this velocity determining the position of the defect on the surface. The device of Pressesky measures changes in optical path length to determine discontinuities in surface (see, e.g., Col. 2. lines 15-24). Focused object beam is moved radially while surface 18 is

spun. Changes in the optical path length are measured to determine discontinuities which are mapped along a preset scanning path (see, e.g., Col. 5, lines 7-30). As stated in the Office Action, Pressesky fails to determine the velocity of a defect on the surface. The Office Action continues (emphasis added):

The computer, however, is able to determine the velocity of a defect on the surface, and therefore its position, even if not explicitly stated in the disclosure. Because the device does detect the frequency shift of the light reflected off the surface, and the change in frequency from the originally emitted light to the reflected light can be determined, the velocity, and therefore position of the surface defects can be easily determined through Doppler shift equations and theory.

In order for a § 102(b) rejection to be proper, the prior art must recite every element of Applicant's Claim 1 either explicitly or inherently. Applicant respectfully notes that a missing element is inherently present in a reference only if that element necessarily follows from what has been expressly described, and would be so recognized by one of skill in the art (as opposed to the examiner's expectation). Mere possibilities or even probabilities are not enough; necessity recognized by those of skill in the art is required.<sup>1</sup> The M.P.E.P. echoes this case law.

<sup>1</sup> The Federal Circuit has clearly set out the standard for inherency in, e.g., Continental Can Co. v. Monsanto Co., 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991)(emphasis added):

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.

M.P.E.P. § 2112 (emphasis in original) (citations omitted).

Further, the following is also emphasized:

In relying upon the theory or inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art.

M.P.E.P. § 2112 (emphasis in original) (citations omitted).

It is well established that a recited element or step is inherently present in a prior art reference only if that element is necessarily present or necessarily performed in that reference, and further that its presence or performance would be recognized by one of ordinary skill in the art from what has been expressly described. Second, the Office Action must provide objective evidence or cogent technical reasoning to support a contention of inherency.<sup>2</sup>

---

To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill. In re Oelrich, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981) (quoting Hansgig v. Kemmer, 40 U.S.P.Q. 665, 667 (C.C.P.A. 1939)) provides: "Inherency, however may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."

This citation is also set out in M.P.E.P. § 2131.01(d).

<sup>2</sup> "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex Parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

Simply because, as the Office Action alleges, Pressesky "can" determine the velocity of a defect is not satisfactory to support an inherency argument. Pressesky fails to recite or suggest all limitations of Applicant's Claim 1, including an evaluation unit. Applicant believes Claim 1 to be patentable over Pressesky for at least these reasons.

Independent Claim 13 recites a method substantially corresponding to the device of Claim 1 and is believed patentable for at least the same reasons.

Claims 2-11 and 14 depend from one or another of the independent claims discussed above and are believed patentable for at least the same reasons. In addition, however, they are also deemed to define an additional aspect of the invention, and should be individually considered on its own merits. Further, Applicant respectfully believes that the § 103 rejections of Claims 3 and 11 to be moot in light of the above remarks and requests their withdrawal.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the currently-pending claims are clearly patentably distinguishable over the cited and applied references. Accordingly, entry of this amendment, reconsideration of the rejections of the claims over the references cited, and allowance of this application is earnestly solicited.

Respectfully submitted,

By 

Aaron Waxler,

Reg. No. 48,027

Agent

(914) 333-9608

December 2, 2003